

Title (en)
INJECTABLE MACROPOROUS HYDROGELS

Title (de)
INJIZIERBARE MAKROPORÖSE HYDROGELE

Title (fr)
HYDROGELS MACROPOREUX INJECTABLES

Publication
EP 3868416 B1 20220810 (EN)

Application
EP 21168993 A 20160908

Priority
• EP 15184552 A 20150909
• EP 16763035 A 20160908
• EP 2016071238 W 20160908

Abstract (en)
[origin: WO2017042301A1] The inventions relates to a method for generating a macroporous hydrogel. In a first step, an aqueous solution of two solutes is produced. The first solute is a polymer that can be cross-linked and is a derivative of polyethylene glycol (PEG) or polyoxazoline (POx) and the second solute is a kosmotropic agent. In a second step, a cross-linking agent is added to the solution. This simultaneously initiates gelation of the polymer and phase-separation, thus creating a macroporous hydrogel. The invention further relates to a macroporous hydrogel, which can be obtained by the inventive method. This macroporous hydrogel is comprised of a cross-linked polymer, which is a derivative of polyethylene glycol (PEG) or polyoxazoline (POx). The hydrogel exhibits interconnected macropores with a size of 200 nm to 1000 µm, particularly 500 nm to 100 µm and is characterized by a pH of of 7,0 to 8,0, particularly approx. 7,4.

IPC 8 full level
A61L 27/18 (2006.01); **A61L 27/20** (2006.01); **A61L 27/22** (2006.01); **A61L 27/26** (2006.01); **A61L 27/38** (2006.01); **A61L 27/52** (2006.01); **A61L 27/56** (2006.01); **C08L 5/02** (2006.01); **C08L 5/06** (2006.01); **C08L 5/08** (2006.01); **C08L 71/02** (2006.01)

CPC (source: CN EP IL US)
A61L 27/18 (2013.01 - CN EP IL US); **A61L 27/20** (2013.01 - CN EP IL US); **A61L 27/227** (2013.01 - CN EP IL US);
A61L 27/26 (2013.01 - CN EP IL US); **A61L 27/3804** (2013.01 - EP IL US); **A61L 27/52** (2013.01 - CN EP IL US);
A61L 27/56 (2013.01 - CN EP IL US); **A61P 9/00** (2017.12 - EP IL); **A61P 19/04** (2017.12 - EP IL); **A61P 19/08** (2017.12 - EP IL);
A61P 21/00 (2017.12 - EP IL); **A61P 25/00** (2017.12 - EP IL); **A61P 43/00** (2017.12 - EP IL); **C08G 65/3322** (2013.01 - EP IL US);
C08J 3/075 (2013.01 - CN IL US); **C08J 9/286** (2013.01 - CN IL US); **C08L 5/02** (2013.01 - EP IL US); **C08L 5/08** (2013.01 - EP IL US);
C08L 53/00 (2013.01 - IL US); **C08L 71/02** (2013.01 - EP IL US); **C08L 71/08** (2013.01 - IL US); **C08L 79/00** (2013.01 - IL US);
A61L 2400/06 (2013.01 - CN); **C08J 2371/02** (2013.01 - CN); **C08J 2405/02** (2013.01 - CN); **C08J 2405/08** (2013.01 - CN);
C08L 2201/54 (2013.01 - IL US)

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WO2023135155A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2017042301 A1 20170316; AU 2016320395 A1 20180222; AU 2016320395 B2 20200917; CA 2992692 A1 20170316;
CA 2992692 C 20211221; CN 108025110 A 20180511; CN 108025110 B 20210820; CN 113372579 A 20210910; CN 113372579 B 20230714;
CY 1124571 T1 20220722; DK 3347061 T3 20210823; DK 3868416 T3 20221031; EP 3347061 A1 20180718; EP 3347061 B1 20210519;
EP 3868416 A1 20210825; EP 3868416 B1 20220810; ES 2883235 T3 20211207; HR P20211306 T1 20211126; HU E055937 T2 20220128;
IL 257024 A 20180329; IL 257024 B 20220201; JP 2018535704 A 20181206; JP 6829898 B2 20210217; LT 3347061 T 20210910;
PL 3347061 T3 20211122; PT 3347061 T 20210825; RS 62239 B1 20210930; SI 3347061 T1 20211130; US 2018264176 A1 20180920

DOCDB simple family (application)
EP 2016071238 W 20160908; AU 2016320395 A 20160908; CA 2992692 A 20160908; CN 201680051583 A 20160908;
CN 202110629796 A 20160908; CY 211100738 T 20210818; DK 16763035 T 20160908; DK 21168993 T 20160908; EP 16763035 A 20160908;
EP 21168993 A 20160908; ES 16763035 T 20160908; HR P20211306 T 20210813; HU E16763035 A 20160908; IL 25702418 A 20180118;
JP 2018511412 A 20160908; LT 16763035 T 20160908; PL 16763035 T 20160908; PT 16763035 T 20160908; RS P20211024 A 20160908;
SI 201631296 T 20160908; US 201615758390 A 20160908